

REMARKS

Reconsideration and allowance of the subject application are respectfully solicited.

Claims 1-11 are pending, with Claims 1, 2 and 11 being independent. Claim 11 was withdrawn from consideration. Claims 1 and 2 have been amended.

Claims 1 and 2 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. This rejection is respectfully traversed, and is submitted to have been obviated by the amendment of Claims 1 and 2 in a manner earnestly believed to avoid the grounds of rejection and since breadth does not constitute indefiniteness.

Claims 1-10 were rejected under 35 U.S.C. §103(a) over JP 2000-235187 (Hachisu et al.). All rejections are respectfully traversed.

Claim 1 recites, inter alia, an elastic modulus E of the bulkheads, an outside pressure P, an area A1 of the substrate, a total area A2 of contact surfaces between the bulkheads and the substrate, and a volumetric shrinkage ratio $\Delta V_{lc}/V_{lc}$ of the smectic liquid crystal within a temperature variation range of an atmosphere in which the liquid crystal device is placed satisfy the following relation:

$$(1/E) \times P \times (A1/A2) \geq \Delta V_{lc}/V_{lc}.$$

Claim 2 recites, inter alia, an elastic modulus E, a height L, a spacing D, and a length H of the bulkheads, an outside pressure P, an area A1 of the substrate, a total area A2 of contact surfaces between the bulkheads and the substrate, and a volumetric shrinkage amount ΔV_{lc} within a temperature variation range of an atmosphere in which the liquid crystal device is placed, of the smectic liquid crystal filled in a space defined by the pair of substrates and a pair of bulkheads satisfy the following relation:

$$(1/E) \times L \times P \times (A1/A2) \geq \Delta V_{lc}/(D \times H).$$

However, Applicants respectfully submit that Hachisu et al. fails to disclose or suggest at least the above-discussed claimed features as recited, inter alia, in Claims 1

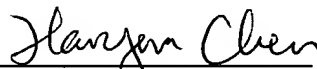
and 2. It is further respectfully submit that there has been no showing of any indication of motivation in Hachisu et al. that would lead one having ordinary skill in the art to arrive at such claimed features. Applicants also note that in the present invention, when the liquid crystal device is constructed so that it satisfies the relationship recited in Claims 1 or 2, the bulkheads are able to shrink in response to the volumetric shrinkage of the liquid crystal, thereby preventing the occurrence of a void in the liquid crystal. In contrast, in Hachisu et al., the occurrence of a void in the liquid crystal is prevented by a different mechanism, namely, by connecting the ends of adjacent partition walls 16 on one side with a connecting wall 161 to form a space S1.

The dependent claims are also submitted to be patentable because they set forth additional aspects of the present invention and are dependent from independent claims discussed above. Therefore, separate and individual consideration of each dependent claim is respectfully requested.

Applicants submit that this application is in condition for allowance, and a Notice of Allowance is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



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